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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,294	02/21/2002	Kimmo Alanen	460-010837-US(PAR)	9809
2512	7590	02/10/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			ISSING, GREGORY C	
			ART UNIT	PAPER NUMBER
			3662	
DATE MAILED: 02/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,294

Applicant(s)

ALANEN ET AL.

Examiner

Gregory C. Issing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The fax copy of the RCE Transmittal sheet, faxed 11/30/2005, is acknowledged. The faxed copy includes a signed copy of the RCE Transmittal.
2. At the outset, a clarification of the claim language is set forth. The claim terminology "to predict a pseudorange" is read in light of the specification, and thus is interpreted by the Examiner as meaning "to estimate a pseudorange." It is not evident how or where an actual prediction is made since the pseudorange appears to be computed according to the specification.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloebaum et al (6,433,735) in view of Krasner (6,133,874).
5. Bloebaum et al disclose a method and apparatus for positioning a wireless communication device (110/200) wherein a database (210/210a) correlates respective cell IDs of base stations with base station position information, e.g. Figs. 3/4; this corresponds to the claimed storing of position data of reference points. The communication device receives the cell ID from the base station in which it is associated and thus is in its vicinity; this corresponds to the claimed examining which reference point is located in the vicinity of the communication device. If the database is at a server, the server transmits the position data, aiding data, to the communication device; this corresponds to the claimed transmitting position data about the reference point. As exemplified in Figure 5, and described in the specification (5:66- 6: 18), the positioning processor utilizes the position entry corresponding to the matched cell-ID information to compute a current position estimate also using position information from a positioning satellite. The cell-indexed location database is capable of aiding in position computation (6:64-67). Thus, Bloebaum clearly specify the use of the position data of the reference station and satellite signal information to compute a position estimate. In a GPS receiver, signal measurements of the incoming signal are correlated with pseudonoise codes for determining time-of-transit from respective satellites (4:5-8); this measurement of time-of-transit is corresponds to a pseudorange measurement.
6. Although Bloebaum et al are considered to substantially disclose the claimed invention via the apparent inherency of using the cell-indexed location as a default location to be used in computing a

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position estimate wherein a position determination in GPS inherently determines a pseudorange, the following citation to Krasner provides evidence of the nature of such. Krasner discloses the following factual statements: (I) there are two principal functions of GPS receiving systems (1) computation of pseudoranges to the various satellites and (2) computation of the position of the receiving platform using these pseudoranges and satellite timing and ephemeris data (1:39-45); (II) an approximate location of the receiver is determined from a cell-based information source and an estimated pseudorange for a particular satellite is determined from time of day, the determined approximate location of the receiver, and satellite position information of the particular satellite (4:50-65); and (III) it is desirable to limit search range during initial signal acquisition to reduce the search time, and the method and apparatus substantially defined by (II) provides such (4:35-65).

7. Thus, should the teachings of Bloebaum et al not be considered as inherently teaching the use of the cell-based location entry as a default location in the estimation of the communication device position nor inherently teaching that a pseudorange is necessarily computed in the determination of position using time-of-transit measurement and the cell-based location entry, it would have been obvious to one having ordinary skill in the art to perform such in view of the teachings of Krasner as set forth above. The dependent claims are shown and/or are obvious in light of the intended uses of the mobile, combined navigation/communication device.

8. Applicant argues that Bloebaum fails to suggest using the reference points to predict a pseudorange between the communication device and a satellite. Applicant also argues that the Examiner's statement that Bloebaum utilize the position associated with the cell-ID as a default location is incorrect and that the position information is merely directed to "aiding data" for improving TTFF or increasing the sensitivity of the mobile terminal.

9. The applicant's arguments are not convincing. Firstly, Bloebaum et al teach that in a GPS receiver, an incoming signal is correlated with PN codes to determine time-of-transit from the respective satellites – this corresponds to a pseudorange measurement and there is no distinction therebetween. Secondly, Krasner further supports such via the fact that one of the two major functions of a GPS receiver is the computation of pseudoranges. Thirdly, in both Bloebaum et al and Krasner, the approximate

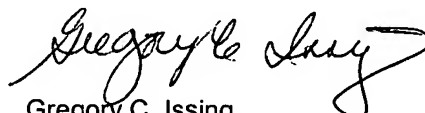
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location of the GPS receiver as derived from a cell-ID location entry is utilized in the computation of user position. Thus, the cell-ID location entries are used in the position computations of the prior art wherein position computation necessarily includes the determination of pseudoranges. Applicant disagrees with the Examiner's characterization of the position of the base station in Bloebaum et al as a default location instead alleging that the position of the base station is only used for aiding data provided to improve the performance of the mobile terminal such as by reducing the TTFF or increasing the sensitivity of the mobile terminal. This argument is not persuasive since Bloebaum et al state that the mobile terminal is configured to identify an approximate geographic position of the mobile terminal by accessing a database (1:44-46) and subsequently utilizing the approximate geographic position associated with the database to determine the geographic location (1:52-60). There is nothing to distinguish the approximated geographic position derived from the database from the claimed "default position."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (571)-272-6973. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory C. Issing
Primary Examiner
Art Unit 3662

gci